



—HELICOPTERS, INC.

PROCESS SPECIFICATION

ERA HELICOPTERS, INC.

GULF COAST DIVISION
LAKE CHARLES, LOUISIANA

PROCESS SPECIFICATION NO. 4005

CLEANING OF ERA AUXILIARY FUEL TANKS

DATE

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2-16-87

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CLEANING OF AUX. FUEL TANKS

1. SCOPE - This specification establishes the requirements and procedures for internal cleaning of fuel tanks.

2. MATERIALS

Painters Tac Rag

Ditzler DX-50

Pressure Wash System

Example - Hudson Sprayer

Varsol Solvent

Mineral Spirits (N.E.)
Gulf Coast Chemical, Inc.
Abbeville, LA.

3. CLEANING PROCEDURE

WARNING: Use air operated vacuum for internal tank cleaning.

3.1 Visually inspect tank and remove debris that can be removed by air vacuum.

3.2 Using painters Tac Rag hand wipe entire tank to remove dust particles from all accessible areas of tank.

WARNING: Use well ventilated area for cleaning with varsol.

3.3 Position tank so sump plate will be lowest area in tank.

3.4 Insert pressure wash wand through most forward section or highest portion of tank.

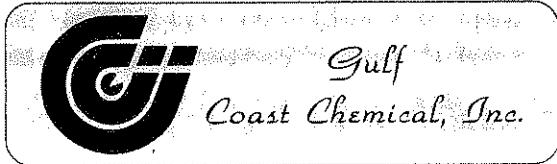
3.5 Spray all internal areas of tank so as to flush debris to lowest portion of tank.

- 3.6 Continue Step 5 by inserting wand in all access openings and flushing solvent and debris to lowest area of tank.
- 3.7 Provide adequate spray to dislodge any debris lodged in corners and areas not easily cleaned with Tac Rag.
- 3.8 After tank has drained and dried properly, air vacuum any debris found in sump area of tank.
- 3.9 Using Tac Rag clean sump area for any remaining lint or debris.
- 3.10 Visually inspect tank for cleanliness.
- 3.11 Mask off all openings to provide maximum cleanliness of tank.

4. QUALITY STANDARDS

Tank must be free of obvious dust particles and debris visible to the naked eye.

Repeat cleaning steps 3.1 - 3.10 until tank is acceptable.



Product Bulletin

MINERAL SPIRITS NE

	SPECIFICATIONS	TYPICAL*
Gravity, API at 60°F (D-287)	48-53	50.0
Specific Gravity at 60°F (D-891)	0.7669-0.7883	0.7796
Color (D-156)	30' min	+30
Flash Point, °F T.C.C. (D-56)	100 min (37.8°C)	105 (40.6°C)
Kauri-Butanol Value (D-1133)	35 min	36'
Aniline Point, °F (D-611)		139 (59.4°C)
Refractive Index at 25°C (D-1218)		1.4325
Odor	Mild	Mild
Residual Odor	None	None
Acidity of Distillation Residue (D-1093)	Neutral	Neutral
Sulfur H ₂ S/Doctor (D-484)	Sweet	Sweet
Corrosion (D-130)	2 max	1
Composition Volume, %		
Aromatics		14
Distillation, °F (D-86)		
IBP	310-320 (154.4-160.0°C)	315 (157.2°C)
10%		325 (162.8°C)
50%	335-350 (168.3-176.7°C)	340 (121.1°C)
90%		370 (187.8°C)
Dry Point	400 max (204.4°C)	388 (197.8°C)

SHIPPING DATA:

Pounds per Gallon, 60°F (15.6°C)	6.49
Flash Point, °F, T.C.C.	105 (40.6°C)
DOT Label Required	None
DOT Identification No.	UN 1255

ASHLAND® Mineral Spirits NE meets the following standard specifications:

- ASTM D-235, Type 1
- ASTM D-484, Type 1 Stoddard Solvent

CODE: 2516000

C.A.S. No.: 64742-88-7

C.A.S. Registry Name: Solvent Naphtha (Petroleum), Medium Aliphatic
() Indicates ASTM Test Method

*Typical analysis not guaranteed.

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NOTICE: Ashland makes no warranty or representation as to the suitability of the product as specified herein for any particular application. The determination of the suitability of the above specification for any particular use is solely the responsibility of the user.

All regulatory health and safety information should be read and understood by all users. Consult the product safety data sheet and other publications for additional safety and health information. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use of the product. Special attention should be given to consumer applications. Freedom to use any patent owned by Ashland or others is not to be inferred from any statement contained herein.